SET OF FINDINGS FOR THE ISSUANCE OF ENDANGERED SPECIES ACT SECTION 10(a)(1)(B) INCIDENTAL TAKE PERMITS FOR THE SAN LUIS VALLEY REGIONAL HABITAT CONSERVATION PLAN

U.S. FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES – MOUNTAIN-PRAIRIE REGION
DENVER, CO
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DESCRIPTION OF THE PROPOSED ACTION

The U.S. Fish and Wildlife Service proposes to issue Incidental Take Permits (Permits) to 12 Permittees in accordance with section 10(a)(1)(B) of the Endangered Species Act of 1973, as amended (ESA). The proposed Permit terms are for 30 years. The following documents were used in the preparation of this Set of Findings and are incorporated herein by reference:

- Draft San Luis Valley Regional Habitat Conservation Plan (HCP) (ERO 2012a)
- Final San Luis Valley Regional HCP (ERO 2012b)
- Draft Environmental Assessment for the San Luis Valley Regional HCP (Draft EA) (USFWS 2012a)
- Final Environmental Assessment for the San Luis Valley Regional HCP (Final EA) (USFWS 2012b)
- Implementing Agreement (IA)
- Biological and Conference Opinion on the proposed Permit action (USFWS 2012c)
- Final Recovery Plan for the Southwestern Willow Flycatcher (USFWS 2002)

The Permits are to be issued to the Rio Grande Water Conservation District (District); Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties; the municipalities of Alamosa, Del Norte, Monte Vista, and South Fork; and the Colorado Department of Natural Resources (DNR) (collectively, the Permittees). The Permits would authorize incidental take of the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher) and the candidate western U.S. distinct population segment of the yellow-billed cuckoo (*Coccyzus americanus*) (cuckoo) for certain activities under their jurisdiction. The covered activities include routine agriculture, small community infrastructure construction and operation, and riparian habitat conservation and restoration activities within the San Luis Valley, Colorado (Valley). Take authorization of the cuckoo will become effective if and when listed in the future.

The incidental take coverage would be extended to residents of the six counties within the HCP area through county resolution, ordinance or other appropriate legal mechanism that documents and provides the authority to enable HCP implementation and Permit protections for landowners within their jurisdiction.

The proposed Permits would be subject to the assurances provided under the "No Surprises" rule at 50 CFR 17.3, 17.22(b)(5) and 17.32(b)(5). Those assurances promise that the Service will not impose further commitments or restrictions on the Permittees as long as the HCP is being properly implemented.

Covered Activities

Covered activities are certain actions that the Permittees or citizens under their jurisdiction may implement over the 30-year Permit terms and that may result in

incidental take authorized by the Permits. Covered activities are described below and in Section 3 of the Final HCP (ERO 2012b).

Routine Agriculture

- Grazing
- Fence construction and maintenance
- Ditch clearing and maintenance
- Water facility maintenance
- New small-scale water facility construction
- Water management and administration

Small Community Infrastructure

- Vegetation removal from floodways
- Levee construction and maintenance
- Sediment removal
- Infrastructure construction
- Infrastructure maintenance
- Road and bridge maintenance

Riparian Conservation and Restoration

- Channel shaping and stabilization
- Habitat creation and restoration
- Weed management
- Wetland creation and management

Activities Not Covered under the Permits

Federal actions that require section 7 compliance under the ESA are not covered by the Permits or HCP. Other activities that are not covered include residential, commercial, industrial, golf course, park, or other public facility development that may impact riparian habitat. Additionally, the Permits and HCP do not cover new construction of large-scale water development or impoundment projects; new construction of sanitation or industrial water impoundments; and new highway construction (details in Section 1.3 of the HCP).

Permit Term, Suspension, Revocation, Renewal, and Withdrawal of Participation

The Permits would be in effect for 30 years. Sections 1.0 and 7.5 of the HCP and Section 6.0 of the IA describe the term of the Permits and provisions for suspension, revocation, withdrawal of participation, and renewal requirements. In the event of suspension or revocation, the Permittees' obligations under the IA and the HCP will continue until the Service determines that all take of covered species that occurred under the Permit(s) has been fully mitigated in accordance with the HCP. Withdrawal of one or more of the counties or local jurisdictions from the HCP will not affect the validity of the HCP or Permits of the other Permittees.

If a Permittee(s) withdraws from the HCP, its Permit and "No Surprises" assurances will be relinquished. No subsequent protection or management of habitat shall be required of the Permittee(s) pursuant to 50 CFR § 17.22(a)(7) unless necessary to mitigate for take of flycatchers and cuckoos that occurred pursuant to the terms of the Permits before the withdrawal, as determined by the Service in collaboration with the Permittee(s).

Upon agreement of the parties and compliance with all applicable laws, the Permit(s) may be renewed in accordance with 50 CFR 13.22. If a Permittee desires to renew its Permit, it will so notify the Service at least one year before the then-current term is scheduled to expire. The Service will reevaluate the HCP and its modifications to determine that permit issuance criteria are met before agreeing to a renewal.

CONSERVATION STRATEGY

Core Habitat Conservation

Although flycatchers have been detected and are suspected to breed on private lands, all known occupied flycatcher habitat is on the Service's Alamosa NWR, the Bureau of Land Management's (BLM) McIntire-Simpson property, and on several State Wildlife Areas managed by Colorado Parks and Wildlife (CPW). To ensure the long-term maintenance of these core habitat areas, these agencies, separate from this HCP, have agreed to continue to protect and manage these parcels in a manner that benefits the flycatcher and cuckoo over the long term.

Federal Lands

The Permittees will work with the Federal agencies (the Service and BLM) to seek their continued commitment for overall conservation of the species by maintaining the covered species' habitat on Federal lands, through Section 7 of the ESA and agency-specific policies. This commitment on the part of the Permittees is documented in the HCP and the IA.

State Wildlife Areas

As an agency under the DNR, CPW is a Permittee and a formal partner in HCP development and implementation. As such, CPW will commit to maintaining the current extent and quality of riparian habitat on SWAs, consistent with current CPW policies and management practices. This commitment is documented in the IA.

Community Outreach and Education

Community outreach and education will occur through numerous contacts and venues with landowners in the Valley. This outreach and education will conserve habitat by:

1. helping landowners and the community understand the value of riparian habitat,

- 2. helping landowners, municipalities, and the community understand how they benefit from this HCP,
- 3. encouraging landowners to participate in HCP mitigation efforts and general habitat conservation programs,
- 4. providing landowners with access to technical and financial resources (including best management practices) that support habitat conservation and minimize impacts,
- 5. reducing impacts to riparian habitat from activities that are outside the scope of the HCP coverage, and
- 6. continually gathering and disseminating new information and techniques on riparian conservation and enhancement.

County HCP Enabling Language

Each county will adopt a resolution, ordinance or other appropriate legal mechanism that documents and provides the authority to enable HCP implementation and Permit protections for landowners within their jurisdiction. The language will affirm the incidental take protections for the covered activities that are included in the Permits by defining county land use authority over typical and routine activities. The language will also establish a clear process for District and county staffs to respond to complaints, inform landowners of their Endangered Species Act responsibilities, and potentially refer information regarding the impacts of non-covered activities to the Service. Adoption of county land use codes will also discourage development in riparian areas. Model language is included in Appendix E of the HCP. A county may expand its land-use controls or habitat protections at its own discretion.

Conservation Support and Coordination

Further conservation efforts include but may not be limited to:

- 1. improved partnerships between willing landowners and habitat enhancement efforts by the Natural Resource Conservation Service (NRCS), Partners for Fish and Wildlife, and other programs,
- 2. improved partnerships between willing landowners and land trusts to complete additional conservation easements that protect riparian habitat in the Valley,
- 3. coordination with the BLM and Rio Grande Natural Area Commission to assist in planning and implementation for the Rio Grande Natural Area where it may intersect with HCP implementation and,
- 4. additional Federal and State grant programs to facilitate ongoing riparian conservation (including Endangered Species Act Section 6 grants, North American Wetlands Conservation Act, and Great Outdoors Colorado (GOCO) grants).

Minimization and Mitigation

Minimization of impacts will occur by providing landowners with access to technical and financial resources (including best management practices) that support habitat conservation. Access to technical resources include, but is not limited to, providing landowners with agency contacts to discuss conservation of riparian habitat and/or directing them to literature on the subject. Access to financial resources includes, but is not limited to, providing information on, or facilitating acquisition of, State, Federal, or non-governmental grant programs that can provide funding for implementation of conservation actions. Best management practices may include, for example, conducting covered activities outside of the breeding season, implementing grazing practices that allow for growth of riparian habitat, or using mats for equipment access in riparian areas to minimize disturbance to vegetation and soils.

Mitigation will be implemented with the following mitigation tools: (1) establishment of conservation easements, (2) habitat restoration or enhancement, (3) management agreements. The Permittees, through the District, will seek landowners to enter conservation easements. Conservation easements may be perpetual or time-limited. A Landowner Cooperative Agreement will accompany a conservation easement to validate the landowner's participation in the HCP mitigation program, describe additional habitat management provisions if needed, and allow monitoring.

Habitat permanently lost (expected to be primarily marginal habitat for the covered species) will be mitigated at a 1.25:1 ratio. Habitat temporarily altered (also expected to be primarily marginal habitat) will be mitigated at a 0.75:1 ratio.

Habitat restoration or enhancement projects will require a management agreement between the Permittees (through the District) and landowners to specify what actions are being taken and to allow for monitoring. A management agreement for maintenance of existing suitable habitat may also be written to allow monitoring of the habitat to ensure that it has remained suitable. Enrollment of lands to serve as mitigation will be on a voluntary basis, but fulfillment of mitigation requirements will ultimately be ensured by the District.

The Permittees have committed to mitigate temporary impacts to habitat (270 acres total estimated over Permit duration) within 5 years of HCP implementation, while permanent impacts to habitat (34.2 acres total estimated over Permit duration) will be tracked and mitigated annually. Federal land may be used for mitigation in Federal/non-Federal partnerships but only the non-Federal contribution will be credited to mitigation. If a time-limited conservation easement expires or a landowner chooses to withdraw from a habitat restoration or enhancement project or a management agreement, the Permittees, through the District administrator, will seek new landowners to enter one of the mitigation tools in order to maintain full mitigation for the Permit duration. The administrator will track lands that can be credited to mitigation. Further information on eligibility and credit of lands can be found in Sections 5.1-5.3 of the HCP.

Monitoring

The District's HCP administrator will be responsible for monitoring compliance with the terms and conditions of the Permits and the effectiveness of minimization and mitigation measures throughout the Permits' 30-year duration. Specific monitoring goals include Valley-wide habitat quantity monitoring that will be conducted every 10 years to track landscape-scale habitat changes and trends, revisit impact assumptions and calculations for the covered activities, revise subsequent mitigation requirements (as needed) and establish reference sites in core habitat occupied by the covered species to establish baseline conditions for habitat quality on mitigation properties. Parcel-specific habitat monitoring will occur on mitigation lands to quantify the mitigation habitat and determine its quality as well as to determine if invasive plants are encroaching and to photo document typical habitat conditions from defined locations. A Habitat Quality Index (HQI) will determine the function and value (i.e., quality) of the habitat (details in Appendix G in the HCP). Species occurrence monitoring will also occur on core habitat areas and mitigation lands (Section 6.1 of the HCP).

Adaptive Management

Adaptive management is a process that allows resource managers to adjust their actions to reflect new information or changing conditions in order to reach a goal, in this case, minimization and mitigation of the impacts of take on covered species.

Monitoring Evaluation

Any need for adaptive management will be based on annual reports and data gathered from monitoring and new research as it becomes available. The results of monitoring will be reviewed annually during the first six years by the steering committee. After that, the results of monitoring will be reviewed every three years by the steering committee. After three years, the first round of monitoring data for each location (reference sites and mitigation lands) will be used to establish baseline conditions for monitoring. This first round of monitoring data also will provide the first opportunity to comprehensively evaluate HQI results and develop guidelines for habitat quality levels that are suitable for mitigation. If monitoring in subsequent years indicates that a mitigation area does not meet suitability guidelines, one or more of the following adaptive management procedures will be initiated:

- Increase monitoring to determine the cause of the habitat decline, and potential remedies.
- Work with landowners to implement management or restoration measures to improve habitat quality (e.g., fencing, irrigation changes, planting, or others).
- Remove the parcel/area from the mitigation pool and substitute with another parcel of sufficient size and quality.
- Retain the parcel/area in the mitigation pool, but at a reduced credit value (with the credit shortfall replaced by another parcel).

Management or restoration measures to improve habitat quality on mitigation lands will be reevaluated after three years. If, after three years, habitat conditions have failed to improve, the area will no longer be eligible for mitigation credit and will be replaced by additional mitigation lands.

Evaluation of Impact Assumptions

The District will update Valley-wide riparian habitat mapping every 10 years. Over time, it is expected that the acreage of woody riparian habitat in the Valley will expand or contract as a result of climate conditions, restoration and enhancement efforts, or changes in water management and agricultural practices. After updated habitat mapping is completed, the District also will revisit assumptions and data used to estimate the impacts of the covered activities. If this evaluation of new information demonstrates that the habitat acres in the Valley or impact assumptions have changed (resulting in greater or fewer impacts), the mitigation requirements for this HCP will be adjusted accordingly.

Changed and Unforeseen Circumstances

Changed and unforeseen circumstances are described in Section 7.4 of the HCP and Section 9.0 of the IA. The Permittees are required to respond to the changed circumstances identified in the HCP in accordance with the USFWS's "No Surprises" rule at 50 CFR 17.22(b)(5) and 17.32(b)(5).

Pursuant to the "No Surprises" rule, the Service will not require any additional land, water, or other natural resources without the consent of the Permittees in the event an unforeseen circumstance occurs, as long as the HCP is being properly implemented. If the Service determines that an unforeseen circumstance has occurred and that additional land, land restrictions, or financial compensation beyond that required under the HCP are needed to conserve the covered species, the Permittees will not be obligated to provide the additional measures without their consent. Pursuant to 50 CFR 17.22(b)(8) and 17.32(b)(8), the Service retains the authority to revoke the Permit, in response to an unforeseen circumstance or otherwise, if we find that continuation of the take permitted under the Permit would appreciably reduce the likelihood of the survival and recovery of a listed species.

Analysis of Effects

The Biological Opinion (BO) (USFWS 2012b) and Section 4.0 of the Final HCP (ERO 2012b) describe the effects the various covered activities have on the covered species. Effects to covered species will primarily be caused by removal, alteration, or degradation of habitat from covered activities. These actions may result in take in the form of harm to adult flycatchers and cuckoos by limiting their breeding, feeding, and sheltering behaviors. Direct effects to the flycatcher and cuckoo may result from destruction of the nest or young or harassment of adults to the extent that they abandon the nest site, causing mortality of the eggs, nestlings, or fledglings.

Effects to Southwestern Willow Flycatcher

Routine agricultural practices such as grazing can result in degraded or reduced amount of habitat by browsing and trampling or subsequent erosion that may remove habitat. Annual grazing may keep habitat below the height or density required for the flycatcher. Fence construction and maintenance can permanently or temporarily remove and bisect habitat. Ditch clearing and maintenance or other water facility maintenance and new water facility construction can also permanently or temporarily remove habitat. Water management can reduce water occurring in natural waterways or manmade canals and ditches that was previously available to develop riparian and wetland areas. However, it may create some habitat in areas previously without riparian or wetland habitat through distribution of water to new areas.

Small community infrastructure projects such as vegetation removal from floodways and infrastructure construction and maintenance such as levees, bridges, and roads may permanently or temporarily remove riparian habitat beneficial to the flycatcher. Sediment removal may prevent establishment of soils that support willows or other riparian habitat. Equipment used during sediment removal may permanently or temporarily crush vegetation and alter habitat.

Riparian and wetland conservation activities such as restoration, creation, channel shaping, channel stabilization, and other management activities may be beneficial in the long run but will have short-term temporary and perhaps permanent impacts to riparian habitat. Weed management will also be beneficial but may have short-term impacts through removal of cover, removal of insect production (foraging) areas, and may disturb birds during implementation.

Implementation of the covered activities over the 30-year life of the Permits is expected to result in temporary modification of habitat or permanent modification or loss of habitat. Temporary habitat modification of 270 acres is expected through some of the covered activities. Riparian/willow habitat modified by actions such as cutting or burning along irrigation ditches is expected to grow back to suitable habitat in approximately 3 years. Because the habitat modification is expected to take place primarily in marginal habitat, have small acreage impacted, and be dispersed, there should be habitat available near covered activities that displaced flycatchers can occupy. Flycatchers should be able to use the temporarily modified habitat with little effect to individual flycatchers and the population in the Valley. Permanent habitat loss or modification due to covered activities over the Permit term is expected to be minimal (34.2 acres) and is expected to also be in small and dispersed areas.

The quantity of nesting habitat that currently occurs and will be maintained through mitigation is sufficient to meet the recovery goals outlined for the San Luis Valley Recovery Unit as prescribed in the flycatcher recovery plan (USFWS 2002). The recovery plan states that when mitigation is required for unavoidable habitat impacts, habitat should be replaced, permanently protected, and managed within the same Management Unit as the impacted habitat. Additionally, Appendix K of the recovery

plan describes considerations to maximize success of restoration if it is used as mitigation. The HCP is consistent with the recovery plan in that it requires mitigation as a tool for recovery within the affected management unit (San Luis Valley) through conservation easements (habitat protection) and/or habitat restoration with management agreements that may last throughout the 30-year permit terms. Additionally, Table 10 of the recovery plan lists the mainstem Rio Grande and Conejos River as areas to focus recovery, which is likely where most mitigation under the HCP will occur.

Despite enough habitat to meet recovery goals in the Valley, loss or alteration of habitat through implementation of the covered activities can take the birds by reducing area available for breeding, feeding, and shelter resulting in loss of adult flycatchers. Loss of nests during project implementation can directly take eggs, nestlings, or dependent fledglings. Disturbance during implementation of covered activities can also result in nest abandonment and death of eggs, nestlings, or dependent fledglings.

Very little habitat on private land in the Valley has been surveyed for the flycatcher, but with pockets of occupied habitat scattered throughout the Valley it is likely that some suitable habitat that will be impacted by covered activities will be occupied by flycatchers. Overall, the extent of temporary or permanent habitat loss is only about 2 percent of available woody riparian flycatcher habitat in the Valley. It is highly unlikely that all habitat expected to be impacted by the covered activities is occupied, and it is expected that covered activities will primarily take place in marginal habitat. Consequently, we expect that only 10 percent of the habitat will be occupied. Therefore, the take of adult flycatchers is calculated by dividing the total estimated amount of habitat affected by the covered activities (304.2 acres) by the average territory size (11 acres) resulting in 28 territories. Multiplying 28 territories by 10 percent, results in 2.8 territories. Rounding up to the nearest whole number results in anticipated take of 3 territories. Assuming all territories have breeding pairs, it is anticipated that 6 individual adults will likely be taken by the covered activities. The removal or alteration of habitat by covered activities harms adults by reducing habitat available for breeding, feeding, and sheltering, which can affect reproduction efforts and indirectly affect individual birds by reducing food and cover necessary to sustain the flycatcher. The anticipated take of territories is only 0.2 percent of the number of territories rangewide.

Covered activities taking place in nesting areas will likely scare away adult flycatchers, but immobile or less mobile eggs, nestlings, or dependent fledglings could be injured or killed causing take at these life stages. The typical clutch size of a nest is 3-4 eggs (Sogge et al. 2010). Therefore, we assume the 3 territories would each have 1 nest and each nest could have 4 eggs, resulting in an anticipated take of 12 eggs, nestlings, or dependent fledglings by the covered activities. The form of take is either direct take by destroying eggs, nestlings, or dependent fledglings or through harassment such that adults do not return to the nest site and eggs, nestlings or fledglings die as a result.

Effects of Flycatcher Mitigation Measures

Although mitigation will provide an overall benefit to the species, implementation of mitigation measures has some potential to harm or harass flycatchers. Activities such as habitat restoration or enhancement may remove or damage small amounts of habitat, or could disturb nearby flycatchers resulting in harassment.

Effects to Southwestern Willow Flycatcher Proposed Critical Habitat

It is anticipated that the covered activities will primarily result in relatively small and dispersed impacts to proposed critical habitat (76 FR 50542). The 304.2 acres expected to be impacted is only 0.3 percent of the 81,002 acres of proposed critical habitat in the Valley. Consequently, we expect the effect to proposed critical habitat to be insignificant.

Summary of the Effects to Flycatchers

Over the 30-year term of the Permits, and considered in addition to baseline conditions, the flycatcher is expected to benefit from implementation of the HCP. Protection and management of riparian habitats will improve the status of the flycatcher in those areas. Furthermore, the habitat that is expected to be lost or degraded is primarily marginal for the flycatcher, while the amount of habitat to be conserved as mitigation will be of good quality for the species. Therefore, the mitigation and minimization measures would more than fully offset the habitat expected to be unavailable, modified, or lost due to the covered activities in the HCP area over the next 30 years. If we have underestimated the extent of habitat that may be unavailable, modified or lost, the HCP includes an adaptive management mechanism for additional mitigation. Thus, the HCP will provide a benefit to the status of the flycatcher over the long term.

Effects to Yellow-billed Cuckoo

Routine agricultural practices such as grazing can result in degraded or reduced amount of habitat by browsing and trampling or subsequent erosion that may remove habitat. Annual grazing may keep habitat below the height or density required for the cuckoo. Fence construction and maintenance can permanently or temporarily remove and bisect habitat. Ditch clearing and maintenance or other water facility maintenance and new water facility construction can also permanently or temporarily remove habitat. Water management can reduce water occurring in natural waterways or manmade canals and ditches that was previously available to develop riparian and wetland areas. However, it may create some habitat in areas previously without riparian or wetland habitat through distribution of water to new areas.

Small community infrastructure projects such as vegetation removal from floodways and infrastructure construction and maintenance such as levees, bridges, and roads may permanently or temporarily remove riparian habitat beneficial to the cuckoo. Sediment removal may prevent establishment of soils that support willows or other riparian habitat

and equipment used during sediment removal may permanently or temporarily crush vegetation and alter habitat.

Riparian and wetland conservation activities such as restoration, creation, channel shaping, channel stabilization, and other management activities may be beneficial in the long run but will have short-term temporary and perhaps permanent impacts to riparian habitat. Weed management will also be beneficial but may have short-term impacts through removal of cover, removal of insect production (foraging) areas, and may disturb birds during implementation.

Implementation of the covered activities over the 30-year life of the Permits is expected to result in temporary modification of habitat or permanent modification or loss of habitat. Temporary habitat modification of 270 acres is expected through some of the covered activities. Riparian/willow habitat, potentially used for cuckoo nesting, and modified by actions such as cutting or burning along irrigation ditches is expected to grow back to suitable habitat within about 3 years. Because the habitat modification is expected to take place primarily in marginal habitat, have small acreage impacted, and be dispersed, there should be habitat available near covered activities that displaced cuckoos can occupy. Cuckoos should be able to use the temporarily modified habitat after about 3 years if they choose to resume using the area. Permanent habitat loss or modification due to covered activities over the Permit terms is expected to be minimal (34.2 acres) and is expected to also be in small and dispersed areas.

Loss or alteration of habitat through implementation of the covered activities can take the birds by reducing area available for breeding, feeding, and shelter resulting in loss of adult cuckoos. Loss of nests during project implementation can directly take eggs, nestlings, or dependent fledglings. Disturbance during implementation of covered activities can also occur resulting in nest abandonment and death of eggs, nestlings, or dependent fledglings.

Very little habitat on private land in the Valley has been surveyed for the cuckoo but it is possible that some suitable habitat that will be impacted by covered activities will be occupied by cuckoos. Overall, the extent of temporary or permanent habitat loss is only about 3 percent of available cottonwood-dominated riparian cuckoo habitat in the Valley Most of the habitat impacted by the covered activities is anticipated to be marginal habitat, so no more than 10 percent of the habitat is expected to be occupied. Therefore, the take of adult cuckoos is calculated by dividing the amount of affected habitat (304.2 acres) by the average territory size (54.4 acres) resulting in 5.6 territories. Multiplying 5.6 territories by 10 percent, results in 0.56 territories. Rounding up to the nearest whole number results in anticipated take of 1 territory. Assuming all territories have breeding pairs, it is anticipated that 2 individual adults will likely be taken by the covered activities. The removal or alteration of habitat by covered activities harms adults by reducing habitat available for breeding, feeding, and sheltering, which can affect reproduction efforts and indirectly affect individual birds by reducing food and cover necessary to sustain the cuckoo. The anticipated take of territories is only 0.1 percent of the number of territories rangewide.

Covered activities taking place in nesting areas will likely scare away adult cuckoos, but immobile or less mobile eggs, nestlings, or dependent fledglings could be injured or killed causing take at these life stages. If there is one territory it is anticipated that one nest would be taken. Average clutch size is 4 eggs (Ehrlich et al. 1988). Therefore, it is anticipated that 4 eggs, nestlings, or dependent fledglings could be taken by the covered activities. The form of take is either direct take by destroying eggs, nestlings, or dependent fledglings or through harassment such that adults do not return to the nest site and eggs, nestlings or fledglings die as a result.

Effects of Yellow-billed Cuckoo Mitigation Measures

Although mitigation will provide an overall benefit to the cuckoo, implementation of mitigation measures has some potential to harm or harass cuckoos. Activities such as habitat restoration or enhancement may remove or damage small amounts of habitat, or could disturb nearby cuckoos resulting in harassment.

Summary of the Effects to Cuckoos

Over the 30-year term of the Permits, and considered in addition to baseline conditions, the cuckoo is expected to benefit from implementation of the HCP. Protection and management of riparian habitats will improve the status of the cuckoo in the action area. Furthermore, the habitat that is expected to be lost or degraded is primarily marginal for the cuckoo, while the amount of habitat to be conserved as mitigation will be of good quality for the species. Therefore, the mitigation and minimization measures would more than fully offset the habitat expected to be unavailable, modified, or lost due to the covered activities in the HCP area over the next 30 years. If we have underestimated the extent of habitat that may be unavailable, modified or lost, the HCP includes an adaptive management mechanism for additional mitigation. Thus, the HCP will provide a benefit to the status of the cuckoo over the long term.

PUBLIC COMMENT

The HCP was developed with considerable input from, and collaboration with, the public and stakeholder organizations. The public participation process included a public scoping meeting, stakeholder consultation meetings, discussions and meetings with individual stakeholders and organizations, presentations to community groups and elected officials, and the dissemination of outreach materials. A list of organizations that were involved in development of the draft HCP is included in Section Error! Reference source not found. of the Final EA.

The formal public scoping process was initiated on January 7, 2005. Public comments and concerns were solicited through public notice in the Federal Register (70 FR 1457), and a press release was sent to the *Alamosa Valley Courier* and *The Pueblo Chieftain* (an out-of-Valley paper with local distribution). A public scoping meeting, sponsored by the Service, was held on January 13, 2005 from 6:30 to 8:30 p.m. at the Alamosa County

Services Center. The information and feedback gathered at this meeting and through the comment period was considered in the development of the HCP.

The release of the draft HCP and EA was published in the *Federal Register* on July 25, 2012 (77 FR 43609), announcing a 60-day public review and comment period. The Service received six responses regarding the draft HCP and EA. Four of these were letters expressing support for the HCP and one stated no comment, but none of these provided specific comments on the draft documents. The sixth letter received from the San Luis Valley Ecosystem Council included more specific comments and questions. The comments did not identify any significant new environmental impacts not previously addressed in the draft EA. Responses to these comments are provided in an appendix to our Finding of No Significant Impact (FONSI). In addition, the District hosted a public presentation and discussion on August 13, 2012, at the Alamosa County Administration Building.

Several other methods have been used to keep the public and stakeholders informed and solicit feedback about the HCP process. On several occasions, District representatives met or talked with individuals from stakeholder organizations, local government staff, and private individuals. The purpose of these discussions was to further explain particular elements of the HCP process, solicit feedback on sections of the draft HCP, and/or gather more specific information about a certain topic area. We initiated formal consultation by letter dated June 1, 2012, with interested tribal governments (in this case the Southern Ute Tribe), per Executive Order 13175, Secretarial Order 3206, and the Department of the Interior Policy on Consultation with Indian Tribes. Background information and project updates, along with information on the HCP and EA, are posted to the project website at www.slvhcp.com.

INCIDENTAL TAKE PERMIT ISSUANCE CRITERIA - ANALYSIS AND FINDINGS

1. The taking will be incidental.

Based on the analyses presented in the HCP (ERO 2012b) and the Service's BO (USFWS 2012c) and Environmental Assessment, which are incorporated herein by reference, the Service finds that take of the flycatcher and cuckoo as a result of covered activities carried out under the HCP will be incidental to, and not the purpose of, otherwise lawful activities.

2. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking.

The Service finds that implementation of the HCP will minimize and mitigate the impacts of take of the covered species to the maximum extent practicable.

Minimization of impacts will be implemented primarily by providing landowners with access to technical and financial resources (including best management practices) that support habitat conservation. Impacts to habitat by covered activities are expected to be primarily in marginal habitat and small in extent compared to the overall size of the plan

area. Because instituting minimization measures across the multitude of covered landownerships in the plan area would be logistically difficult, the HCP focuses on offsetting the impacts as the primary conservation strategy for the covered species.

Mitigation of permanent impacts will be at a 1.25:1 ratio and is commensurate in type and level with permanent loss for 4 reasons: 1) impacts will primarily occur in marginal habitat; 2) the type of mitigation in the HCP (conservation of habitat entailing protection, restoration, enhancement and management) is biologically related to the type of impacts (habitat loss and degradation); 3) mitigation will entail the conservation of higher quality habitat and in larger blocks than those impacted; and 4) mitigation requirements were calculated using a high-end estimate of habitat loss. Therefore, this mitigation strategy will more than offset permanent impacts of the covered activities.

Temporary habitat impacts will be mitigated at a 0.75:1 ratio and is commensurate with the impacts for several reasons: 1) the impacts will occur primarily in marginal habitat, 2) the mitigation will occur in larger blocks and be of higher quality, 3) sufficient habitat will be available for species' use on a rotating basis in about 3 years following a covered activity (see Section 3.1 of the HCP for fuller explanation of the rotating matrix of habitat availability), 4) the amount of temporary habitat loss was calculated using high-end estimates, 5) mitigation acres will be in core or buffer habitat areas helping ensure long-term habitat connectivity, protection, and enhancement of ecological functions and processes that support sustainable populations of the covered species, and 6) temporary impacts anticipated for the 30-year Permit durations will be fully mitigated within the first 5 years of HCP implementation. Therefore, this mitigation strategy will more than offset temporary impacts of the covered activities.

Adaptive management will be used to adjust mitigation amounts if necessary so that all impacts will be fully compensated, as described under Section 6.2 of the HCP. Furthermore, even if one of the Permittees withdraws from the HCP or other natural or man-induced changes occur, mitigation will be completed for these changed circumstances as described under Section 7.4 of the HCP.

3. The applicant will ensure that adequate funding for the plan and procedures to deal with unforeseen circumstances will be provided.

As described in Section 7.1 of the HCP, the District will work with the other Permittees to fund implementation of the HCP, but funding assurances for HCP implementation ultimately falls with the District. Funding will come primarily from the District's regular operating expenses, but funding is also expected to come from County discretionary funds, and State funding through the CPW, DNR, or other programs. These basic funding sources also may be supplemented by State or private grants. Average annual costs for the first 10 years are estimated to be \$48,250 for District administrative staff support/mitigation coordination, education and outreach, habitat quality monitoring, and covered species surveys. Additionally, every 10 years it is estimated that an additional \$67,000 will be spent on Valley-wide habitat mapping, adaptive management efforts (including outside consultant support, legal counsel, and administrative overhead), and

landowner notifications (increased outreach effort). By Colorado law, local units of government are not allowed to budget monies for future expenditures. The District's Board of Directors has made a commitment in past years to fund the personnel necessary to carry out the requirements of the HCP and continues to recognize the need to fund the HCP in the future if monies continue to be available in the District's annual budget process. If at any point in the implementation and administration of this HCP, funding becomes unavailable to meet commitments, the Permittees will consult with the Service to examine potential solutions for ensuring full implementation of the HCP before determining whether the HCP or ITPs need to be amended, modified, suspended, or terminated.

4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

The Service finds that the taking to be authorized under the proposed Permits will not appreciably reduce the likelihood of the survival and recovery of the covered species in the wild. The ESA's legislative history establishes the intent of Congress that this issuance criterion be identical to a finding of "no jeopardy" pursuant to section 7(a)(2) of the ESA and the implementing regulations pertaining thereto (50 C.F.R. 402.02). As a result, the Service reviewed the proposed issuance of the Permits under section 7 of the ESA. In the section 7 BO (USFWS 2012c) for the flycatcher, the Service reviewed the current status; the environmental baseline; and the direct, indirect, and cumulative effects of the proposed issuance of Permits. The Service concluded in the BO that the issuance of the Permits under the HCP will not appreciably reduce the likelihood of survival and recovery of the flycatcher. In the Conference Opinion (USFWS 2012c) for the cuckoo, the Service concluded that the issuance of the Permits under the HCP will not result in destruction or adverse modification of proposed flycatcher critical habitat. Furthermore, under the Conference Opinion, the Service concluded that the issuance of the Permits will not likely jeopardize the continued existence of the cuckoo.

5. The applicant will ensure that other measures that the Service may require as being necessary or appropriate will be provided.

All necessary measures are included in the HCP and/or the Permit. Necessary measures included development of the IA and those measures which are the responsibility of the Permittees, including but not limited to reporting, providing notice, and participating in the HCP steering committee. The Service finds that no additional measures are required.

6. The Service has received such other assurances as may be required that the HCP will be implemented.

The Service finds that the HCP and the IA provide the necessary assurances that the HCP will be implemented by the Permittees. By accepting the Permits, the Permittees are bound to fully implement the provisions of the HCP in accordance with the IA.

ALTERNATIVES

A more detailed description and analyses of the following alternatives are contained in the HCP, EA, and FONSI.

Proposed Alternative

The proposed alternative is a regional HCP with a comprehensive conservation strategy for the entire San Luis Valley, as detailed in the Description of the Proposed Action above.

No-action Alternative

This alternative does not include development of a regional HCP with a comprehensive conservation program. The District, local governments, and landowners can choose to develop individual HCPs if their activities are at risk of taking the flycatcher or cuckoo (if it becomes listed).

Public Lands Alternative

This alternative is similar to the Proposed Alternative, but habitat restoration and enhancement would occur only on public lands rather than private lands or a combination of private and public lands.

GENERAL CRITERIA AND DISQUALIFYING FACTORS -- FINDINGS

The Service has no evidence that the Permit applications should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b)-(c). The applicants have met criteria for issuance of the Permits and do not have any disqualifying factors that would prevent the Permits from being issued under current regulations.

RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, I recommend approval of the issuance of the Permits to the District, Counties, Municipalities, and DNR, in accordance with the HCP and its supporting IA.

Michael Thabault

Acting Regional Director, Region 6

U.S. Fish and Wildlife Service

Denver, CO

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